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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,519	11/09/2000	Satoru Nippa	2185-480P	1737

2292 7590 06/27/2005

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/708,519	NIPPA, SATORU	
	Examiner	Art Unit	
	Callie E. Shosho	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/4/05 & 4/5/05.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
 4a) Of the above claim(s) 3 and 4 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1 and 2 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☒ Claim(s) 1-4 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/4/05 has been entered.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1-2, drawn to resin composite, classified in class 524, subclass 437.
 - II. Claims 3-4, drawn to method for producing a resin composite, classified in class 523, subclass 333.

3. The inventions are distinct, each from the other because:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as melting the resin, incorporating the aluminum hydroxide, and cooling the mixture to yield a solid composite

or mixing a powdered resin with aluminum hydroxide and then compacting the mixture to form a solid composite.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with John Bailey on 1/25/02 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-2.

In the amendment filed 4/15/03, applicant's affirmed their election of Group I, claims 1-2. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Further, claims 3-4 were withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention.

In the amendment filed 1/29/04, applicants acknowledged their prior election of Group I, claims 1-2.

6. Applicants are advised that since Group I, drawn to the product, has been elected, and in the event that the product claims are subsequently found allowable, and further, the withdrawn process claims of group II are amended to depend from or otherwise include all the limitations of the allowable product claims, then the process claims of Group II will be rejoined with the product of Group I. See MPEP 821.04.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (U.S. 4,491,553).

Yamada et al. disclose a resin composite comprising a resin such as ethylene/vinyl acetate copolymer, polybutadiene, polyisoprene, polystyrene, and chloroprene rubber and filler such as aluminum hydroxide having average particle diameter of 0.01-50 μm (col.3, lines 13-15 and 66-7, col.5, lines 15-19, 21-22, 35, and 42). Given that the average particle diameter is the size of the aluminum hydroxide based on the particle size distribution of the aluminum hydroxide, and not on agglomerated particles, it is clear that this is equivalent to the primary particle diameter as presently claimed.

Using the specification as a dictionary in order to define the Y/X index (see MPEP 2111.01), it is noted that page 5, lines 20-24 and page 6, lines 1-3 define the index as a measure of the degree of dispersion of the aluminum hydroxide in the resin and that the higher the dispersion degree, the smaller the index. Therefore, although there is no explicit disclosure in Yamada et al. that the composite has index Y/X of 0.1 or less as presently claimed, given that Yamada et al. disclose that the dispersion of the filler in the resin is very uniform (col.6, lines 19-21) and in light of the definition of the Y/X index as described above, it is clear that the

composite of Yamada et al., which possesses high degree of dispersion, i.e. filler is very uniformly dispersed, would inherently possess index Y/X of 0.1 or less as presently claimed.

In light of the above, it is clear that Yamada et al. anticipates the present claims.

Response to Arguments

9. Applicant's arguments and 1.132 declaration filed 4/4/05 and 4/5/05 have been fully considered but they are not persuasive.

Specifically, applicant argues, as well as provides 1.132 declaration, to support argument that contrary to examiner's position, the non-kneading method of Yamada et al. et al. (examples 3-5), do not produce resin composite with Y/X index as presently claimed.

However, it is the examiner's position that the declaration is not persuasive for the following reasons.

In the declaration filed 4/5/05, applicant produces resin composite by mixing aluminum hydroxide powder with PTFE emulsion and then drying to form mixture which is then mixed with styrene butadiene rubber (SBR), zinc oxide, stearic acid, age resistor, wax, vulcanizing accelerator, and sulfur followed by molding. However, the declaration is not persuasive because there is not proper side-by-side comparison between the present invention and that of Yamada et al. Specifically, it is not clear what method is used in the declaration to form the resin composite or why the method appears different from that of Yamada et al. and that utilized in the present invention as well as that utilized in the first declaration filed 4/15/03. That is, in Yamada et al., the aluminum hydroxide and resin, i.e. SBR, are mixed in the presence of aqueous PTFE emulsion whereby resin and aluminum hydroxide agglomerate and from the agglomerate, resin

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composite is produced. In the present specification (see, for instance, example 1), aluminum hydroxide is mixed with SBR to form mixture to which is added various additives (NaCl solution, age resistor, extender oil, etc.) followed by drying. To the dried cake is added vulcanizing accelerator, sulfur, zinc oxide, stearic acid, age resistor, and wax. However, in the experiment set forth in the declaration, the aluminum hydroxide and resin emulsion are mixed followed by drying and then addition of SBR and zinc oxide, stearic acid, etc.

Thus, it is not clear why in the declaration, the aluminum hydroxide and resin emulsion are first dried and then added to SBR. It is not clear what, if any, effect drying the aluminum hydroxide/PTFE emulsion mixture would have on the Y/X value of the produced resin composition. It is not clear what effect the differences in the method utilized in the present specification and the method utilized in the declaration would have on the Y/X index of the produced resin composite. Clarification is requested.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
6/21/05